Project No. W-____-____-

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER
TECHNICAL REVIEW FORM

DISTRIBUTION SYSTEMS
(N.J.A.C. 7:10-11.10)

Water Purveyor	PWSID#	Municipality

New Demands of this Project

Estimated additional residential peak demand: _____ Using: ☐ DEP standards (N.J.A.C. 7:10-12.6) or ☐ Department of Community Affairs standards x 3 = peak (N.J.A.C. 5:21-5.1)

Estimated of new non-residential average demand: _____ Using N.J.A.C. 7:10-12.6 – Table 1
Peak demand = 3 x average daily demand: _____ As per N.J.A.C. 7:10-12.6(b)2.
Total estimated additional demand: _____ Estimated additional residential demand + estimated additional non-residential demand.

➢ Note: Supporting data & calculations must be included in the Engineers Report and on the Plans ➢

Existing Demands

Current system peak daily demand: _____ Month/Year:
(Avg day demand of the peak month in past 5 yrs)

Previously allocated water: _____ Projects approved by the Bureau of Safe Drinking Water, but not yet constructed; attach additional sheets listing Permit Numbers and estimated demands

Total current peak daily demand: _____ Current system peak daily demand + previously allocated water

Estimated New Peak Daily Demand: _____ Total estimated additional demand from this project + total current peak daily demand

System Source Capacity

Total source capacity: _____ Attach list of all sources with capacities

Firm source capacity: _____ Total source capacity - largest source / treatment unit

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Pipe information:

Diameter (in)	Length (LF)	Material
_____	_____	
_____	_____	
_____	_____	
Total Length (LF)	_____	

	YES	NO	N/A
1. Does the system have adequate firm source capacity to meet the estimated new peak daily demand?	☐	☐	☐
2. Are the water mains designed to maintain a minimum pressure of 20 pounds per square inch (psi) at street level under all flow conditions?	☐	☐	☐
3. Is the minimum diameter of all distribution mains six inches for systems with an average daily demand less than one MGD and eight inches for larger systems? If not, is justification provided by hydraulic analysis, taking into consideration future water usage?	☐	☐	☐
4. Are distribution mains designed to provide a maximum flow velocity (excluding fire flow) of five feet per second for mains up to 16 inches in diameter and 10 feet per second for mains greater than 16 inches in diameter?	☐	☐	☐
5. Are the distribution mains laid in a loop system to eliminate dead ends?	☐	☐	☐
6. Is each dead end provided with a fire hydrant, flushing hydrant, or a valved outlet to which a temporary pipe may be affixed, to discharge flushed water above ground at a minimum pipe flushing velocity of 2.5 feet per second?	☐	☐	☐
7. Are all distribution mains covered with a minimum of 3.5 feet or earth or other suitable cover to prevent freezing? (Minimum depth of cover: _____)	☐	☐	☐
8. Will the water mains be disinfected prior to being placed in service in accordance with N.J.A.C. 7:10-11.6(d)?	☐	☐	☐
9. Are all water mains and sanitary or industrial sewer lines separated by a horizontal distance of 10 feet, or if such lateral separation is not possible, are the distribution and sewer lines in separate trenches with the top of the sewer line at least 18 inches below the bottom of the water main?	☐	☐	☐
10. At crossings of sewer lines and water mains, is the top of the sewer line at least 18 inches below the bottom of the water main, or if such vertical separation is not possible, is the sewer line of watertight construction (i.e. ductile iron, reinforced concrete pipe, etc.) with watertight joints that are a minimum of 10 feet from the water main?	☐	☐	☐

	YES	NO	N/A
11. Are the water mains equipped with n-1 valves at intersections to minimize service interruption and safety hazards during repairs?	☐	☐	☐
12. Do water services and plumbing conform to the requirements of the Plumbing Subcode of the New Jersey State Uniform Construction Code, N.J.A.C. 5:23-3.15?	☐	☐	☐
13. Does the design involve water mains being constructed to cross surface waters? (How many? _____)	☐	☐	☐
Are the proposed surface water crossings satisfactory to this Department?	☐	☐	☐
14. Are chambers or pits containing gate valves, air-relief valves, blowoffs, meters, or similar appurtenances properly drained?	☐	☐	☐
15. Is any blow off, air-relief valve, flushing device, hydrant drain, or chamber or pit directly connected to a storm sewer or sanitary sewer?	☐	☐	☐
16. Does the open end of all automatic air-relief pipes extend from the manhole or enclosing chamber to a point at least one foot above the surrounding grade, and provided with a down facing elbow or mushroom cap and an insect screen?	☐	☐	☐
17. Does the open end of all manual air-relief pipes extend to the highest point in enclosing chamber, unless a high water table necessitates that the air-relief pipe extend above ground?	☐	☐	☐
18. Are any physical connections with an unapproved water supply proposed?	☐	☐	☐

Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers.

I hereby certify that answers provided herein are accurate and reflective of the project being considered for approval.

Signature of Engineer Date N.J.P.E. #
Professional Engineer's Embossed Seal

Type or Print Name of Engineering Firm